

PROPOSED AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method performed by a client comprising:

storing a secret in a secure storage;

receiving a password challenge from a server; and

responsive to the password challenge, calling a secure password prompt routine to execute a procedure, wherein the procedure comprises:
 - (1) accessing the secret in the secure storage;
 - (2) generating an authentication graphic based on the secret; and
 - (3) rendering a prompt at a display device, the prompt including a request for a user to input a password and the authentication graphic, which are visible to the user; wherein the secure password prompt routine renders the authentication graphic for all password challenges;receiving the password from the user;

generating a digest with a cryptographically-safe function that includes indicia of the received password and the received password challenge, wherein the digest is a communication that securely protects the password from being intercepted; and

sending the digest to the server, wherein the server verifies the digest by comparing it to a recalculated digest that includes an indicia of the password challenge and a stored authentic password.

2-3. (Cancelled)

4. (Previously presented) The method of claim 1, further comprising making the authentication graphic known to the user so that the user can identify the authentication graphic on the prompt prior to the user inputting a password in response to the prompt.

5. (Previously presented) The method of claim 4, wherein making the authentication graphic known comprises physically attaching the authentication graphic to the client.

6. (Cancelled)

7. (Previously presented) The method of claim 1, wherein the secret becomes stored in the secure storage when first entered by the user.

8. (Previously presented) The method of claim 1, wherein the secret becomes stored in the secure storage when generated based upon information entered by the user.

9. (Previously presented) A client device comprising:

a secure storage to store a secret;

a communications device to receive a password challenge from a server;

and

a secure password prompt routine embodied in the communications device to, in response to the password challenge, execute a procedure, wherein the procedure comprises:

(1) accessing the secret in the secure storage, wherein the secret is a string of bits indicating colors and patterns for constructing the authentication graphic;

(2) generating an authentication graphic based on the secret[[,]]; and

(3) rendering a prompt at a display device, the prompt including a request for a user to input a password and the authentication graphic, which are visible to the user, wherein the secure password prompt routine renders the authentication graphic for all password challenges;

a display device to present the rendered prompt to the user such that the authentication graphic of the presented prompt is recognized by the user as being associated with a secure request to input the password; and

a hash function embodied on the communications device to calculate a digest, wherein calculating comprises:

(1) receiving a password in response to the received password challenge, wherein the password is received upon the user identifying the authentication graphic as authentic;

(2) altering the password such that, if the digest is captured by an attacker, the attacker is unable to recreate the password; and

(3) calculating the digest from the password challenge and the altered password.

10-12. (Cancelled)

13. (Previously presented) The client device of claim 9 wherein the authentication graphic is included on a body of the client device.

14. (Cancelled)

15. (Previously presented) A machine-readable medium having stored thereon data representing instructions that, when executed by a processor of a client, cause the processor to perform operations comprising:

receiving a password challenge from a server;

responsive to the password challenge calling, a secure password prompt routine to execute a procedure, wherein the procedure comprises:

(1) accessing the secret in the secure storage;

(2) generating an authentication graphic based on the secret; and

(3) rendering a prompt at a display device, the prompt including a request for a user to input a password and the authentication graphic, which are visible to the user; wherein the secure password prompt routine renders the authentication graphic for all password challenges;

receiving the password from the user;

altering the received password utilizing a hash function;

generating a digest using the altered password and the received password challenge; and

sending the digest to the server without directly passing the password over a communications medium.

16-17. (Cancelled)

18. (Previously presented) The method of claim 15, further comprising making the authentication graphic known to the user so that the user can identify the authentication graphic on the prompt prior to the user inputting a password in response to the prompt.

19. (Previously presented) The method of claim 15, wherein making the authentication graphic known comprises physically attaching the authentication graphic to the client.

20. (Cancelled)

21. (Previously presented) The method of claim 1, wherein making the authentication graphic known comprises including the authentication graphic in a user manual for the client.

22. (Previously presented) The method of claim 1, wherein the authentication is unique to the client.